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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,053	02/28/2006	Raphaël Visoz	33901-194PUS	3049
27799 7590 01/21/2009 COHEN, PONTANI, LIEBERMAN & PAVANE LLP 551 FIFTH AVENUE SUITE 1210 NEW YORK, NY 10176				
EXAMINER				
AHN, SUNG S				
ART UNIT		PAPER NUMBER		
2611				
MAIL DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/570,053

**Applicant(s)**

VISOZ ET AL.

**Examiner**

SUNG AHN

**Art Unit**

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings (fig. 2, 3, and 4) are objected to because the unlabeled rectangular box(es) shown in the drawings should be provided with descriptive text labels.

Diagrammatic blocks are required to be labeled to indicate contents or function. See 37 CFR 1.83 (a), 1.84 (g). Correction is required.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

2. Claims 2-9 and 11-15 are objected to because of the following informalities:  
typographical errors. The term "A" in claims 2-9 and 11-15 should be corrected to --The--  
-, respectively. In addition, the same typographical errors and other misspellings should  
be corrected in the specification. Appropriate correction is required.
3. Claim 9 is objected to because of the following informalities: The acronym for  
first "ST-BICM" needs to be spelled out when it is used first time in each independent or  
subsequent dependent claim. Also claim 9 should be dependent on claim 8, not claim  
7. Appropriate correction is required
4. Claim 10 is objected to because of the following informalities: The acronym for  
first "SIC" and "PIC" need to be spelled out when it is used first time in each  
independent or subsequent dependent claim. Appropriate correction is required

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly  
claiming the subject matter which the applicant regards as his invention.
6. Claims 2-4, 10, and 12-15 rejected under 35 U.S.C. 112, second paragraph, as  
being indefinite for failing to particularly point out and distinctly claim the subject matter  
which applicant regards as the invention.
7. Claim 2 recites the limitation "the equalizer" in line 2. There is insufficient  
antecedent basis for this limitation in the claim.

8. Claim 3 recites the limitation "the equalizer" in line 2. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 4 recites the limitation "the equalizer" in line 3. There is insufficient antecedent basis for this limitation in the claim.
10. Claim 10 recites the limitation "said device" in line 3. There is insufficient antecedent basis for this limitation in the claim.
11. Claim 10 recites the limitation "the subtracted data" in line 7. There is insufficient antecedent basis for this limitation in the claim.
12. Claim 10 recites the limitation "the subtractor" in line 13. There is insufficient antecedent basis for this limitation in the claim.
13. Claim 12 recites the limitation "the subtracted data" in line 2. There is insufficient antecedent basis for this limitation in the claim.
14. In claims 12-13, applicant has claimed both an apparatus and the process of using the apparatus and it is indefinite (See MPEP 2173.05(P)). Claims 12-13 recites "method comprising" whereas the parent claim 9 recites "the apparatus" which directed to structural limitation. Therefore, it is unclear how a "characterized method" constitutes in an "iterative decoder and equalizer".
15. Claim 13 recites the limitation "the decision algorithm" in line 2. There is insufficient antecedent basis for this limitation in the claim.
16. Claim 14 recites the limitation "the subtracted data" in line 2. There is insufficient antecedent basis for this limitation in the claim.

17. Claim 14 recites the limitation "the decision algorithm" in line 3. There is insufficient antecedent basis for this limitation in the claim.

18. In claims 10-15, it is not clear what method steps applicant is claiming. Method claims should be represented by clear active steps that specify the steps to performing the method. They should not state results of the steps but rather the active steps to achieving the results.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUNG AHN whose telephone number is (571)270-3706. The examiner can normally be reached on Monday-Friday, 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571)272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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